Suicide and Violence Assessment in Substance Abuse Treatment

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“There is only one important philosophical question:

Whether to commit suicide or not”

Albert Camus, in *The Myth of Sisyphus*

Suicide and Mental Illness: Postmortem Studies

Study	Place	N	% With Mental Illness
Robins et al, 1959	U.S.	134	94
Dorpat and Ripley, 1960	U.S.	114	95
Barraclough et al, 1974	U.K.	100	93
Beskow, 1979	Sweden	271	97
Chynoweth et al, 1980	Australia	135	88
Rich et al, 1988	U.S.	204	92
Cheng, 1995	Taiwan	116	97

Predisposing Factors

90%-93% of suicides have an Axis 1 Diagnosis

- **Affective disorders**
  - **-15% lifetime risk**
  - **-60% of suicides**
- **Alcoholism/substance abuse**
  - **-2%-7% lifetime risk**
  - **-15%-25% of suicides**
- **Schizophrenia**
  - **-5-10% lifetime risk**
  - **-10%-15% of suicides**
- **Panic Disorder**
  - **-Comorbid risk factor**

Suicide Rates by Risk Group

Risk Group	Actual/Approximate Numbers	Annual Rate per 100,000	Percent
Total general population	31,284*	11.4	0.01
Affective disorders	18,000	90	0.1
Alcoholism	6,256	45	0.05
Schizophrenia	3,128	174	0.2
Ideation	27,000	540	0.5
Attempts	5,631-11,888		18-38

*1995

Affective Disorders and Suicide

- Lifetime risk: 15%
- Annual risk: 0.1%-1% (M>F)
- Percentage of suicides: 50%-70%
- High-risk profile:
  - -Psychic anxiety or panic symptoms
  - -Moderate alcohol abuse

Annual Suicide Rates: General vs. Depressed Groups

General Population

- 0.01% suicide rate
- 11.4 suicides/100,000
- 99.99% do not commit suicide

People With Depression

(10 x the General Rate)

- 0.1% suicide rate
- 106 suicides/100,000
- 99.9% do not commit suicide

Mortality: Bipolar Index Group vs. General Population

Deaths, %

Cause of Death	Observed*	Expected†	Mortality Ratio
Suicide	15.7	.67	23.4
Cardiovascular	42.1	14.0	3.0
Respiratory	33.3	1.08	3.1

*Index group.

†General population.

Sharma R, Markar HR. J Affect Disord. 1994;31:91-96

Alcoholism/Substance Abuse & Attempted Suicide

- Lifetime risk: 15%-25%15-40% of all attempts
- Typically impulsive, not premeditated
- High-risk profile:
  - -Young, female
  - -recent heavier than usual drinking
  - -Recent relationship problems
  - -Active SUD and intoxicated
  - -Comorbid depression

Alcoholism/Substance Abuse & Completed Suicide

- **Lifetime risk: 2%-7%; 15-35% of suicides; 1/5-1/3 of excess deaths in substance abusers due to suicide; commonest methods GSW, drug OD**
- **High-risk profile:**

-Prior attempts w/low chance rescue

-Interpersonal loss, unemployment; if employed, wknds

-Active SUD and intoxicated; cocaine use

-Comorbid depression, ASPD, BPD

-Younger, male, both drug and alcohol use disorder

-If older, medical problems [PUD]

-If female, poor, hopelessness, childhood trauma

Substance Abuse & Suicide

- **Alcohol significantly increases risk** [Duberstein et al, 1993]
- **Alcohol involved in 36% of suicides** [Hayward et al., 1992]
- **Alcohol consumption positively associated with severity of attempt** [King et al., 1993]
- **Alcohol consumption within 2 hours of attempt in 46%** [Merrill et al., 1992]

Alcoholism/Substance Abuse: High Risk Profiles

- Prior attempts w/low chance rescue
- Interpersonal loss within 6 weeks
- Unemployment
- If employed, weekends
- Active SUD and intoxicated; cocaine use
- Comorbid depression, ASPD, BPD
- Younger, male, both drug and alcohol use disorder
- If older, medical problems [PUD]
- If female, poor, hopelessness, childhood trauma

Mortality: Bipolar Index Group vs. General Population [% deaths]

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Risk suicide highest in young males, early phase, prior attempts, alcohol abuse, recently discharged from hospital, mixed, psychotic mania, and depressed phase Simpson and Jamison J Clinical Psych 1999

Schizophrenia and Suicide

- Lifetime risk: 10%; 10%-15% of suicides
- High-risk profile:
  - -WM, < 30 yrs, white, high ed. level
  - -Depressive symptoms
  - -Chronic, relapsing course
  - -Less likely to communicate suicidal intentions
- Methods more likely to include leaping, self-immolation, other unusual means

Firearms and Other Methods of Suicide

- Firearms account for 55%-60% of suicides
- Firearms at home increase risk significantly for adolescents
- Other methods:

-Hanging:	14%
-Poisoning (ingestion):	11%
-Poisoning (gases):	9%
-Other:	8%

Suicide Assessment Protocol

- Identify predisposing factors (Axis I and II diagnoses)
- Clarify potentiating factors
- Conduct specific suicide inquiry
- Determine level of intervention
- Document assessments

Specific Suicide Inquiry

- Ask about:
  - -Suicidal ideation
  - -Suicide plans
  - -Suicide attempts
- Give added consideration to:
  - -First episode of suicidality
  - -Changes in nature, method, lethality of suicidality
  - -Aborted suicide attempts
  - -Ambivalence (chance to intervene)
  - -Psychological pain history

Components: Suicidal Ideas

- Time, frequency
- Motivating forces
- Basis (e.g., feeling worthless)
- Relationship to illness/psychosocial factors
- Method
  - -Availability
  - -Degree of planning
  - -Lethality
- Rehearsal
- Deterrents

Assess Alliance

- Is patient willing/able to communicate suicidal/self-destructive thoughts?
- Inform patient about clinician's expectation/need to know status of suicidal ideation

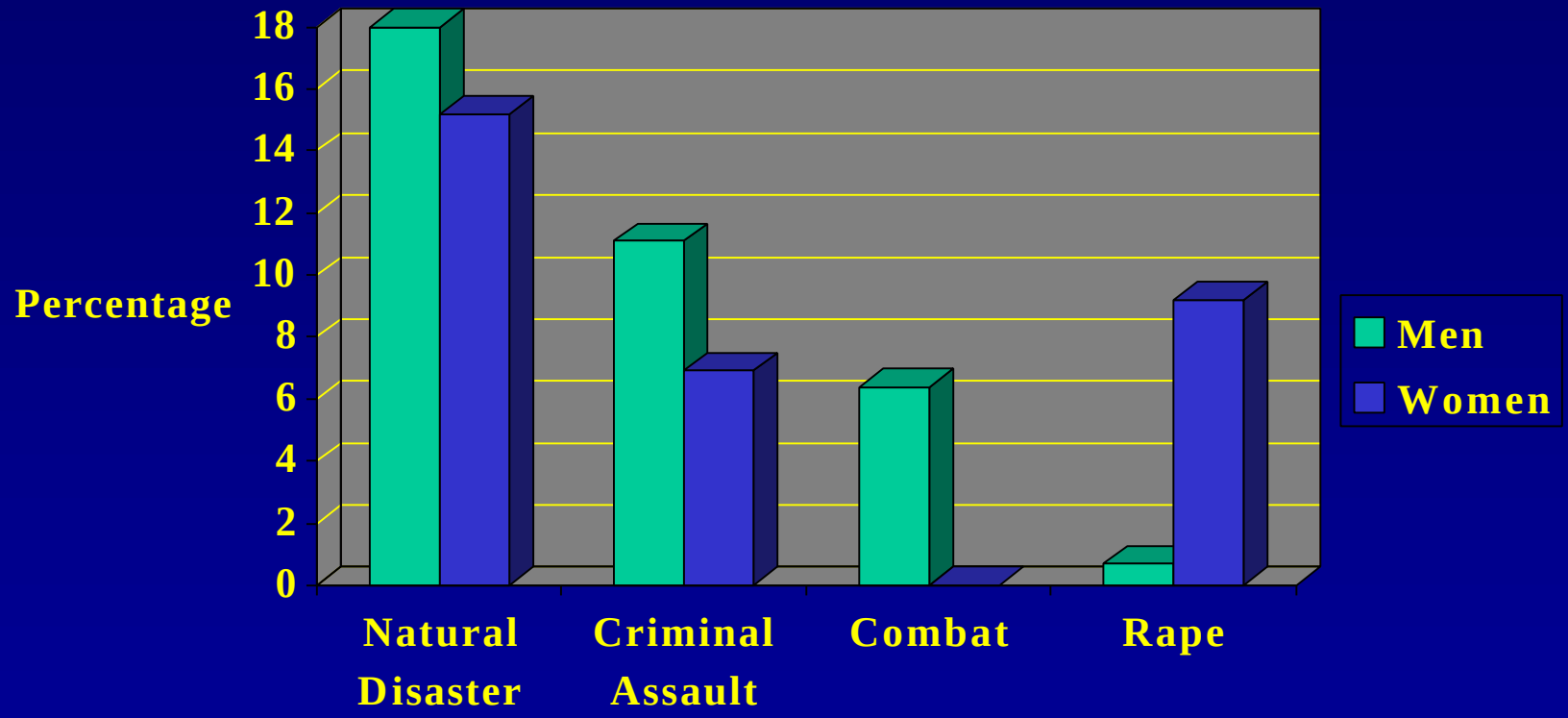
Document Suicide Risk Assessments

- At EACH assessment, if any suicidal behavior or ideas, or after signif. clinical change
- Document current plan, risk factors [gun, intoxication, will changes, depression, active alcoholismor drug addiction, schizophrenia, bipolar d/o, panic d/o, past attempts], alliance, NSH agreement, consults w/ MH, family, and others
- Assess and document person's competence to provide and withold info on suicide ideas

Types of Aggression

- Socially Sanctioned
- Premeditated [ASPD]
- Impulsive [Substance Use Disorders, Antisocial PD, Borderline PD, Narcissistic PD, OC PD, Paranoid PD, Major Depression, Bipolar Disorder]

Risks of Specific Traumas in the U.S. Population



(Kessler et al., 1995)

CLINICAL RISK FACTORS FOR VIOLENT BEHAVIOR AND MURDER

- Substance Use Disorders, especially early onset alcohol or drug use disorders
- Antisocial Personality Disorder
- +/- Schizophrenia with delusions
- Most homicidal behavior not associated with specific psychiatric or substance use diagnosis

Swanson et al., Hosp Commun Psychiatry 1990; Fulweiler et al., Psychiatr Serv 1997; Asnis et al., Psychiatr Clin North Am 1997

RISK FACTORS FOR VIOLENT BEHAVIOR AFTER PSYCHIATRIC DISCHARGE

NYC Study [*N* = 430]

2 Week followup following index psychiatric discharge

NO community controls; interview only

- **Violence in month before hospitalization increased risk 9-fold**
- **Personality Disorders [mostly cluster B] and substance abuse 4X more likely to recommit violence**
- **Violence most often against intimates including family members**

Tardiff et al., Psychiatr Serv 1997

RISK FACTORS FOR VIOLENT BEHAVIOR

MacArthur Foundation Study [N= 1136]

50 Week followup following index psychiatric discharge; community controls

- **No increased risk among non-substance abusing mentally ill subjects**
- **Substance Use Disorder significantly increased violent risk among both discharges and community dwellers**
- **Especially if combined w/ [cluster B] PD**
- **Also if combined with adjustment disorder**
- **Violence interview of subject & collateral >> records**

Steadman et al., Arch Gen Psychiatry 1998

Substance Use & Aggression: Emergency Room Data

- 37% of violent injuries occurred in bar or restaurant; 42% had BAL > 0.08g/dL; high rates of positive urine drug screens [UDS]*
- Among life-threatening assaults, 84% have positive BAL and 19% positive cocaine UDS**
- Among violent injuries, elevated rates of positive BALs and positive UDS***

*Macdonald et al. 1999; ** Beech and Mercadel, 1998; *** Cherpitel 1993

ANGER AND VIOLENT BEHAVIOR IN PRIMARY CARE: RISK FACTORS

- Men: hit as child, nervous, drug use
- Women: drinking problem, being down, hit as child [whites only]

Wyshak and Modest, Arch Fam Med, 1996

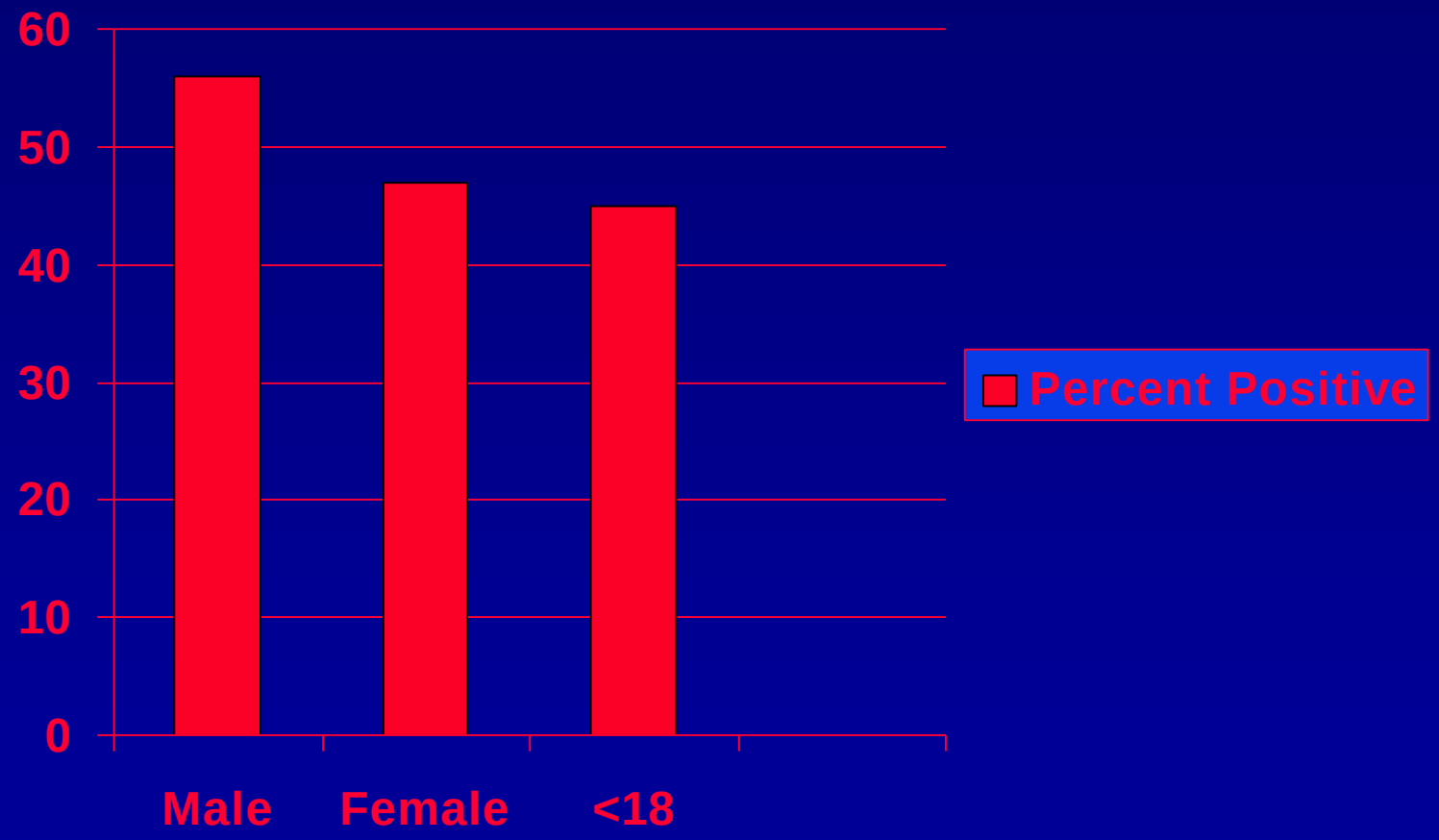
Violent Men in Substance Abuse Tx: Prevalence and Risk Factors

- 58% of men in relationship x 1 yr reported ≥ incidence of family physical violence in PY
- 100% of these 59 men reported marked verbal hostility in PY
- Risks for greater violence: hostile verbal outbursts, interpersonal insensitivity, lower GAF, hostility, suspiciousness, projection of blame, interpersonal inadequacy

Brown et al. Addict Behav 1998

SUBSTANCE ABUSE/AGGRESSION IN CRIMINAL JUSTICE SYSTEM, 1998:

PER CENT POSITIVE URINE DRUG SCREENS OF VIOLENT CRIME ARRESTEES



ASSAULT & SUBSTANCE USE IN WOMEN: LONGITUDINAL RELATIONSHIPS

- 3006 women followed 2 years
- Use of drugs, but not alcohol at baseline increased odds of new assault in next 2 years
- After new assault, increased rates of both alcohol and drug abuse

Kilpatrick et al., J Consult Clin Psychol 1997

PREVALENCE OF DOMESTIC ABUSE

Intimate Partner Violence Against Women

- Physical violence
  - Annual incidence 10-12%
    [1M/yr; 21% of F. emerg. surgery]
  - Lifetime prevalence 20-25%
- Rape
  - Lifetime prevalence 14%
    [10X rate of MVA deaths]
- Female homicides
  - % by partner/former partner 32-52%

Warshaw, 2000

PREVALENCE OF DOMESTIC ABUSE
Patients Seen in MH/AODA Settings

Outpatient		Inpatient	
Adult physical	42%	Adult physical	64%
Adult sexual	38%	Adult physical	38%
Child physical	35%	Child physical	44%
Child sexual	42%	Child sexual	22%

Jacobson Am J Psych 1989

PREVALENCE OF DOMESTIC VIOLENCE: Mental Health Effects

Disorder	Prevalence	RR
Depression	48%	2.9
Suicide Attempts/Suicides*	18%	5
PTSD	64%	11
Alcoholism	19%	5
Drug Abuse	9%	9

*1/4 of white female, and 1/2 of black female suicide attempts occur after a battering

Golding JM. *J Fam Violence* 1999

PARTNER VIOLENCE IN SUBSTANCE ABUSERS: RISK FACTORS

- **Neuropsychologic impairment predicts total and severe husband-to-wife violence** Schafer and Fals-Stewart Addict Behav 1997
- **Young age [20-35], married or separated and severe drug problems predict partner violence**

  Chermack, Fuller, and Blow, Drug Alcohol Depend 2000
- **Early marital violence or verbal aggression, esp. where husband, but not wife is heavy drinker**

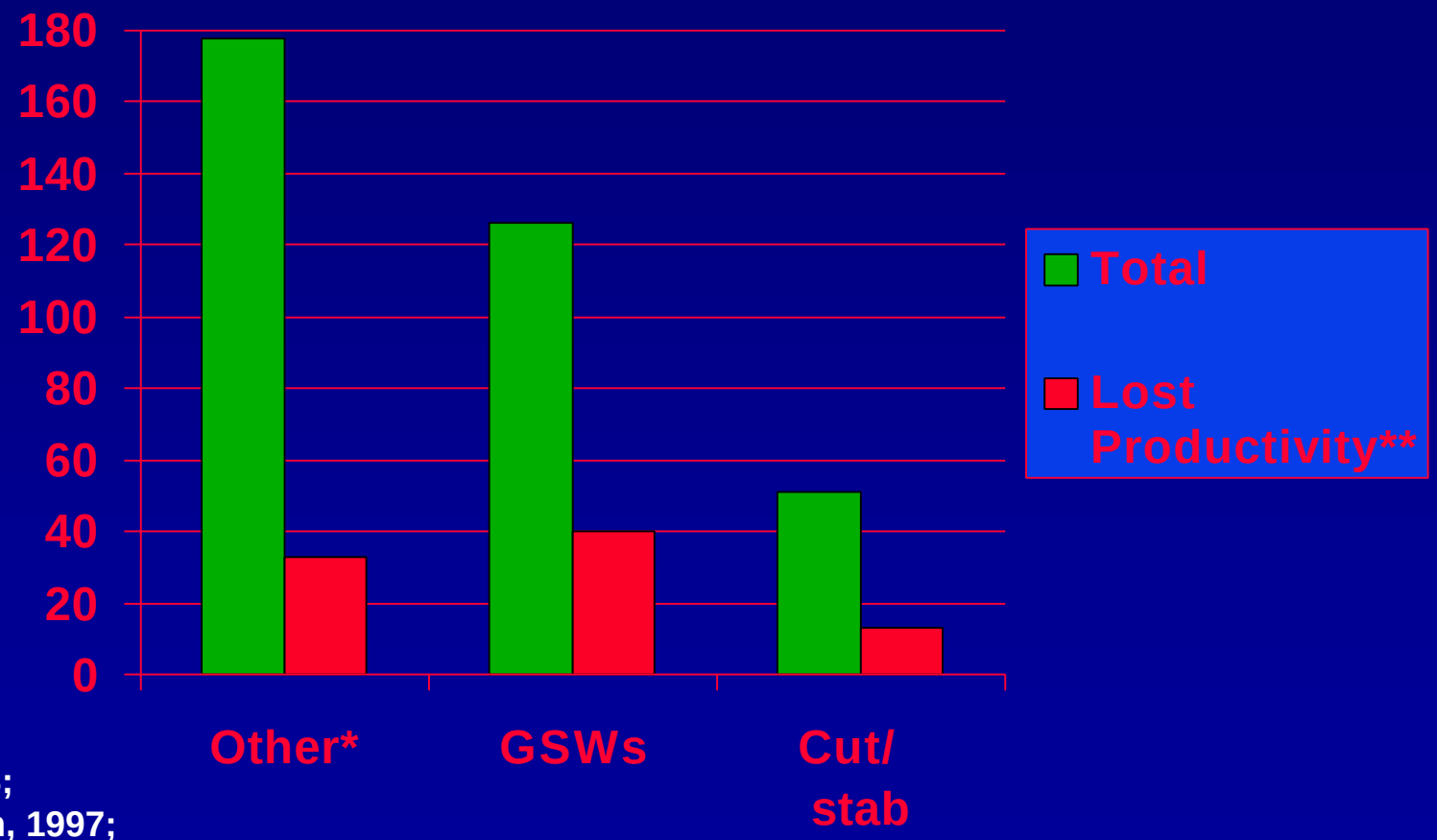
  Quigley and Leonard, Alc Clin Exp Res 2000

Consequences of Not Recognizing Domestic Abuse in Clinical Settings

- Initial visit for isolated injury
- Frequent subsequet visits for multiple somatic complaints
- Seen for depression, PTSD
- Blamed, labeled, stigmatized
- Rx for anxiolytics, analgesics
- Despair, isolation
- Increased risk of substance use disorders, suicide attempts, re-injury, homicide

Stark, E et al Int J Health Serv 1979

Cost of Crime: Economic Burden of Violence, in $Billions



Miller et al., 1993;
Miller and Cohen, 1997;
Cook et al., 1999

*Rape, assault, robbery, arson, murder
**Lost productivity and physical injury

Prevalence of Personality Disorder

- 5.9% for a Definite DSM-III-R Dx
- 3.4% for a Provisional DSM-III-R Dx
- 9.3% for a Definite or Provisional Dx

MEDIAN PREVALENCE OF DRAMATIC CLUSTER PERSONALITY DISORDERS

Sample	Non-clinical*	Clinical**
Antisocial	2.0%	7.0%
Borderline	1.6%	31.0%
Histrionic	2.2%	19.0%
Narcissistic	0.2%	6.0%

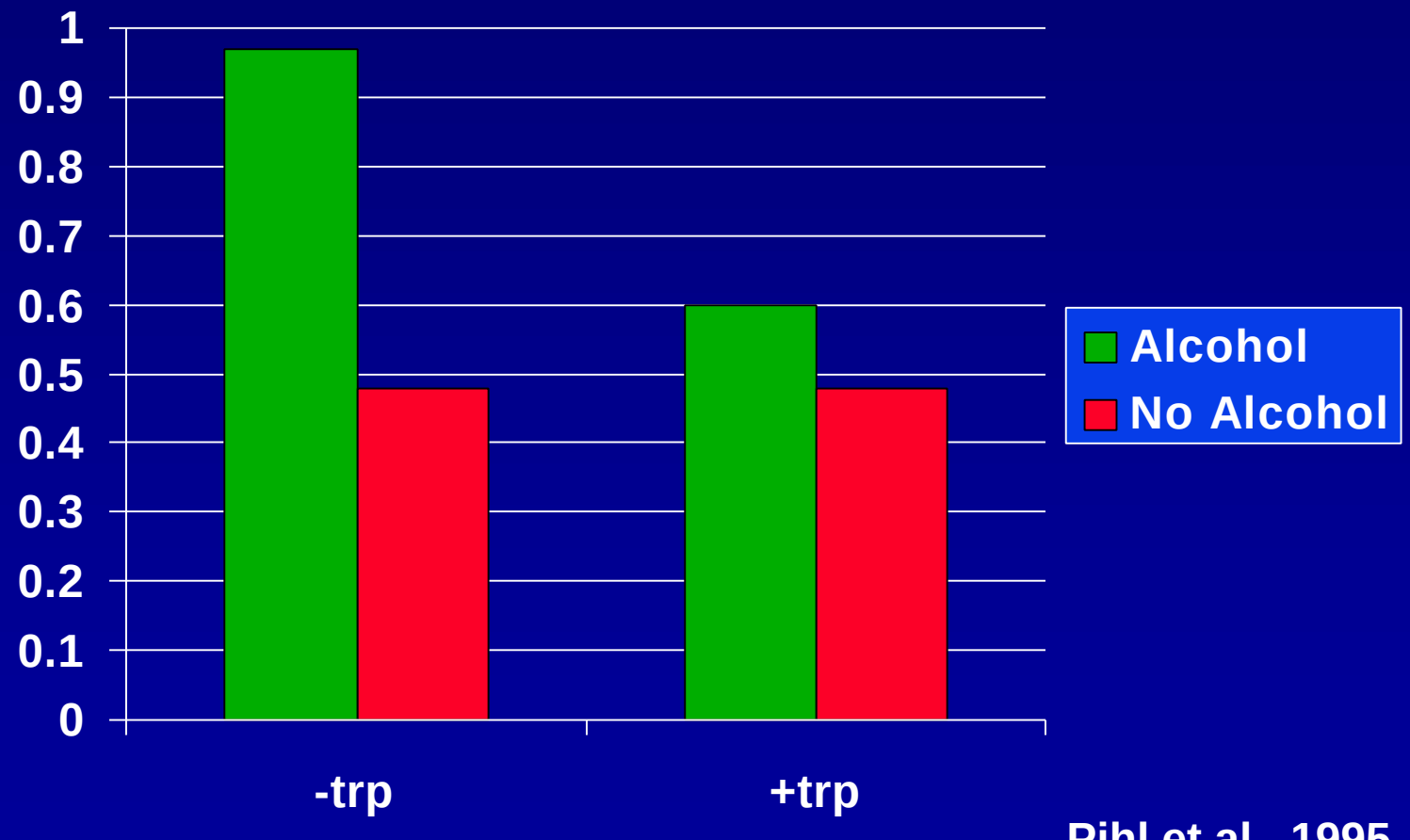
* Lyons, 1995; ** Widiger 1991

Biology of Aggression

- Familial Clustering: IED increased 4x in IED+ families [Coccaro, 2000]
- BD irritability, verbal assault, indirect assault, and direct assault scales each 35-52% heritable [Coccaro, 1997]
- Low CSF 5-HIAA predicts impulsive violence and suicide attempts [Linnoila et al., 1983]
- More errors in identifying anger, disgust, surprise in IED; failure to regulate emotions [Davidson et al., 2000] ;more disadvantageous picks in gambling task reflecting medial PFC [Best et al., 2000]

Tryptophan Depletion and Alcohol-Induced Aggression:

Duration of Shock Administered by Subjects



Pihl et al., 1995

Domestic Violence and Alcoholism: Effectiveness of Marital Group Therapy

- Alcoholic couples in Conjoint Group Couples Therapy [Project CALM] involving communication skills training, community reinforcment, disulfiram contracts
- Frequency of marital violence declined 90% in first 6 months, with no substantial post-treatment increase in 2 years followup

O' Farrell et al., 1995

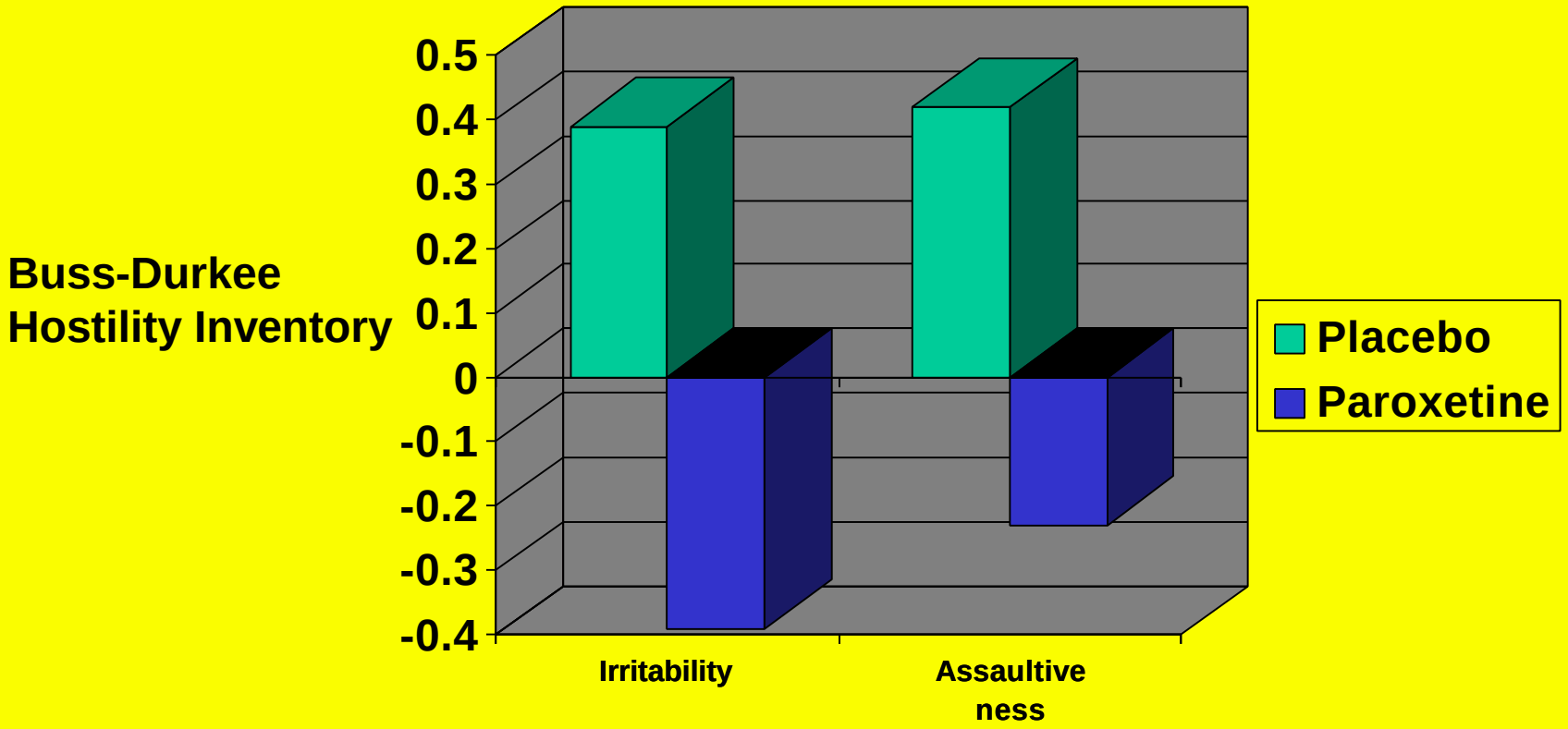
Domestic Violence and Substance Use Disorders: Psychotherapy

- Substance Abuse 60-75%; Dependence 33-50% in Court-Mandated Anger Management Classes
- Intervention in one of two such groups [20 participants/ group] using a motivational enhancement session re: substance use
- Significant effect on substance use and self-reported violent behaviors at followup

Aggression: Pharmacotherapy

- Phenytoin: 75% decrease in impulsive, but not premeditated aggression in inmates [Barratt et al, 1997]
- SSRI pts. with depression have 50% decline in anger/panic attacks from baseline of 20-40% [Fava 2000]
- VPA useful in fluoxetine non-responders [Kavoussi and Coccaro, 1998]
- AMI increased aggressive acts in non-responding BPD pts. [Soloff et al., 1986]

Reduction in Hostility with Paroxetine at Week Four



Knutson et al. *Am J Psychiatry* 1998

Prevalence of Anger Attacks in Unipolar Depression

- Major Depression
  - 44% (56/127)*
  - 39% (64/164)**
- Atypical Major Depression
  - 38% (36/94)***
- Dysthymia
  - 28% (21/74)***
- Normal controls
  - 0% (0/38)***

*Fava, et al. 1993; **Fava, et al 1996; ***Fava, et al. 1997b.

Violent Threats and Murder

AMONG MURDERERS WHO THREATENED TO MURDER SOMEONE IN MONTH BEFORE COMMITTING A MURDER,

ONLY 1/3 OF VICTIMS WERE THE SUBJECT OF THE THREAT

Dietz, 1998

Specific Violence Risk Inquiry

- Ask about:
  - -Childhood physical abuse
  - -Conduct, Antisocial and Borderline Personality Disorder Features
  - -History of verbal aggression and physical violence
  - -Suicide attempts
- Give added consideration to:
  - -Having gun in home
  - -Recent violence
  - -Impending or recent separation or divorce
  - -Neuropsychologic impairment and h/o head injury or neurologic disorder

Assess Alliance

- Is patient willing/able to communicate violent and aggressive thoughts?
- Inform patient about clinician's expectation and need to know status of violent ideation and acts
- Is patient willing to abstain from substance use, take disulfiram, have urine drug screens, and remove weapons?

Document Violence Risk Assessments

- At EACH assessment, if any violent behavior or ideas, or after significant clinical change
- Document current plan, risk factors [gun, intoxication, relationship changes, depression, active alcoholismor drug addiction, mania, schizophrenia, past violence], alliance, no violence agreement, consults w/ MH, family, and others
- Assess and document person's competence to provide and withold info on violent ideas
- Inform police and potential victims [Schmidt decision] if risk substantial even if no specific victim named
- Document reasons if you decide not to inform;consult!